## **DF-72/EC**



### SMOKE DETECTOR

For Use with DF-16/EC Security Console

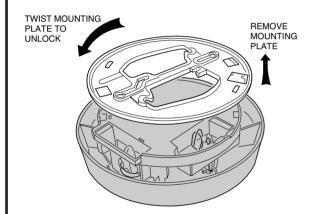
Installation Instructions



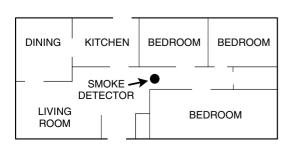
# Linear

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**STEP 1** *Remove mounting plate.* Remove the unit's mounting plate by turning the plate counterclockwise.



**STEP 4** *Pick smoke detector location.* Referring to the NFPA standard on the back of this sheet, select a good location to mount the DF-72/EC. Mounting the DF-72/EC on foil-backed wallpaper or on a metal single-gang electrical box is not recommended because the radio range will be reduced.



#### DESCRIPTION

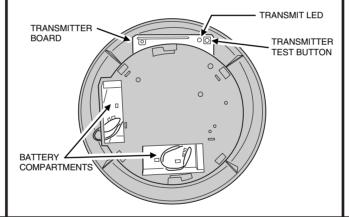
The DF-72/EC is a high quality, photoelectric smoke detector with a built-in supervised digitally-coded radio transmitter. The DF-72/EC monitors and then transmits alarms, low battery, and test signals. The DF-72/EC sounds a local alarm as soon as smoke is detected. Twenty seconds after the local alarm sounds, the DF-72/EC's transmitter will send an alarm signal to the console. The alarm signal will be repeated every 20 seconds as long as smoke is still present.

Coding switches are not required or used in the DF-72/EC. Each transmitter is pre-coded at the factory to a unique code. With the DX format, there are more than one million codes possible.

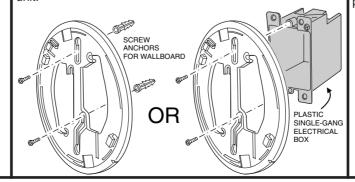
The smoke detector and transmitter are powered by two 9-volt batteries. These batteries are supplied with the transmitter and can power the unit for up to two years. If the battery voltage drops below a preset level, a low battery report is sent to the receiver every hour.

NOTE: After replacing batteries, press transmitter test button to reset "low battery circuit"

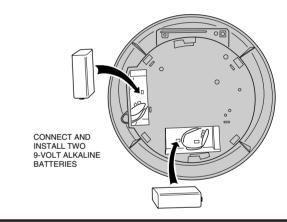
**STEP 2** *Identify components.* Examine the DF-72/EC to identify the component locations.



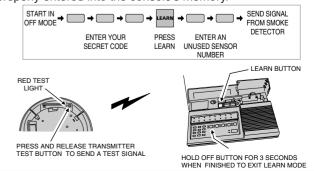
**STEP 5** Install mounting plate. Use the two screws and anchors provided to attach the mounting plate to the wall or ceiling. Alternately, the mounting plate can be attached to a plastic single-gang electrical outlet box. For the best radio range, observe the "best signal" label on the bottom of the unit.



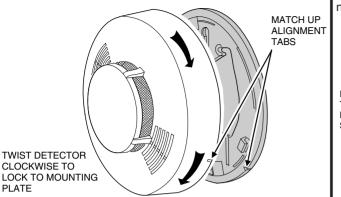
**STEP 3** *Install batteries.* Connect the two 9-volt batteries and place them into the battery compartments.



**STEP 6** *Program into receiver.* Follow the DF-16/EC console's instructions to set it in a program or learn mode. Press the transmitter test button (not the smoke detector's test button) to send a test signal. The transmit LED should light. Verify that the signal was received and that the transmitter was properly entered into the console's memory.



STEP 7 Attach DF-72/EC to mounting plate. Match up STEP 8 Test smoke detector. Set the console into a test alignment tabs on detector and plate. Turn detector clockwise until it locks in place.

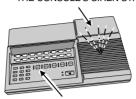


mode. Press and hold the smoke detector test button. Continue to hold the test button for at least 30 seconds after the noisemaker starts. Verify that the signal was received.



PRESS AND HOLD DETECTOR TEST BUTTON, SMOKE DETECTOR'S BEEPER WILL START TO SOUND

CONTINUE TO HOLD THE SMOKE DETECTOR'S TEST BUTTON FOR ABOUT 30 SECONDS UNTIL THE CONSOLE'S SIREN STARTS



PLACE CONSOLE IN OFF MODE TO STOP SIREN. CHECK THAT THE SENSOR STATUS LIGHT IS BLINKING

#### NFPA 74 STANDARD FOR SMOKE DETECTOR LOCATION

The DF-72/EC should be installed in accordance with National Fire Protection Association (NFPA) Standard 74, which reads as follows:

2-1.1.1Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics\*.

The provisions of 2-1.1.1 represent the minimum number of detectors required by this standard. It is recommended that the householder consider the use of additional smoke or heat detectors for increased protection for those areas separated by a door from areas protected by the required smoke detectors under 2-1.1.1 above. The recommended additional areas are: living room, dining room, bedroom(s), kitchen, attic (finished or unfinished), furnace room, utility room, basement, integral or attached garage and hallways not covered under 2-1.1.1 above. However, the use of additional detectors remains the option of the householder.

2-1.1.2 For family living units with one or more split levels (i.e., adjacent levels with less than one full story separation between levels), a smoke detector required by 2-1.1.1 shall suffice for an adjacent lower level, including basements.

#### NFPA 74 STANDARD FOR SMOKE DETECTOR LOCATION

Exception: Where there is an intervening door between one level and the adjacent lower level, a smoke detector shall be installed on the lower level.

- Ceiling mounted smoke alarms should be located in the center of the room or hall or not less than 4 inches (10 cm) from any wall. When the detector is mounted on a wall, the top of the detector should be 4 to 12 inches (10-30 cm) from the ceiling.
- Po not install smoke alarms where normal ambient temperatures are above 100°F (37.8°C) or below 40°F (4°C). Also, do not locate alarm in front of air conditioners, heating registers or other locations where normal air circulation will keep smoke from entering the detector.

#### FIRE PREVENTION AND ESCAPE

The purpose of an early warning smoke alarm is to detect the presence of fire in its early stages and sound an alarm giving the occupants more time to exit the premise before the smoke reaches a dangerous concentration level.

Fires start even with the best of housekeeping and fire prevention procedures. Fire is an unexpected event. Early warning detection alerts occupants in time to act.

KNOW FIRE HAZARDS. No detection device can protect life in all situations. Therefore, safeguards should be taken to avoid such potentially dangerous situations as: smoking in bed, leaving children home alone, cleaning with flammable liquids such as gasoline

#### FIRE PREVENTION AND ESCAPE

The best fire protection is minimizing fire hazards through proper storage of materials and general good housekeeping techniques. A cluttered basement, attic, or other storage area is an open invitation to fire. Careless use of combustible materials and electrical appliances, or overloading of electrical outlets are other prime causes in starting fires.

It is most important that explosive and/or fast burning materials be eliminated from the home, it

Even after proper precautions have been taken, fires can start. Be prepared.

IN CASE OF FIRE. Leave immediately. Don't stop to pack or search for valuables. In heavy smoke, hold your breath and stay low - crawl if necessary. The clearest air is usually at the floor.

If you have to go through a closed door, carefully feel the door and door knob to see if undue heat is present. If they seem relatively cool, brace your foot against the bottom of the door with your hip against the door and one hand against the top edge. Open it slightly. If a rush of hot air is felt, slam the door quickly and latch it. Unvented fire tends to build up considerable pressure. Be sure all the household realizes and understands this danger.

Use your neighbor's phone or a street fire alarm box. The job of extinguishing the fire should be left to the professionals. Too many unforeseen things can occur when inexperienced people try to extinguish a fire.

#### FIRE PREVENTION AND ESCAPE

BE PREPARED. Perform fire drills regularly. Use them to assure recognition of an alarm signal. For your protection, simulate different circumstances (smoke in hall, in living room, etc.). Then have everyone react to the situation.

Draw a floor plan and show two exits from each room. Frequently a knotted rope or ladder from a window will serve this purpose. It is important that children be instructed carefully, because they tend to hide in times of crisis.

It is imperative that one meeting place outside the home be established. You should insist that everyone meet there during an alarm. This will eliminate the tragedy of someone reentering the house for a missing member who is actually safe.

If you have children and/or invalids residing in your household, you can help your fire department. Most fire departments have window decals available for use in children's or invalid's bedrooms. Properly used, these decals will quickly identify sleeping quarters of these individuals and show the fire department where to look first for members of your household.

Additional information on Household Fire Warning is available at nominal cost from: The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. Request Standard No. NFPA 74.

#### INTERNATIONAL WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. The Warranty Expiration Date is labeled on the product. This warranty extends only to wholesale customers who buy direct from Linear or through Linear's normal distribution channels. Linear does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any, There are no obligations or liabilities on the part of Linear Corporation for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation. All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until Warranty Expiration Date as labeled on the product. This Linear Corporation Warranty is in lieu of all other warranties express or implied. For warranty service on Linear equipment return product, at sender's expense to:

Linear Hong Kong 19/F Hounor Industrial Centre, 6 Sun Yip Street Chai Wan, Hong Kong Attention: Repairs Department

Charges will be made for equipment that is not in warranty, shows customer abuse, or is damaged by the effects of lightning. water, fire, or other abnormal happenings. Customer's equipment sent in for repair may be repaired or replaced with new or remanufactured equipment at Linear's discretion. The customer is always responsible for shipping and handling charges to the repairs facility. Linear will pay return shipping and handling charges on "in warranty" products shipped back to the customer. The customer will be billed for the return shipping and handling charges on "out of warranty" products. There will be a 50% expedite fee for any express requests. The International Sales Manager must be notified prior to the return of product to Linear. All international returns must have an International Repair Authorization number (IRA#). The number must be marked on all packages. Failure to do so will cause delays in processing.

Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However there are some limitations which must be observed. The radios are required to comply with local rules and regulations as radio devices. As such, they have limited transmitter power and therefore limited range. A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings. Changes or modifications to the device may void regulatory compliance. Infrequently used radio links should be tested regularly to protect against undetected interference or fault. A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users. Copyright © 2003 Linear Corporation

